CARBON FOOTRING IN GREEN COMPUTING

GROUP NO - 9

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HISTORY

- ➢ **Started in 90's**
- ➢ **Energy star program**
- ➢ **Basic use**
- ➢ **Goal**

INTRODUCTION

GREEN COMPUTING

➢ **Environmentally responsible**

➢ **Disposal of electronic waste (e-waste)**

➢ **Reducing environmental hazardous material**

➢ **sustainable resources**

➢ **Green computing technology**

➢ **stages in the lifecycle**

CARBON FOOTPRINTING

- ➢ **Greenhouse Gases (GHG)**
- ➢ **Global Warming**
- ➢ **word's carbon dioxide emission percentage**
- ➢ **important measure**
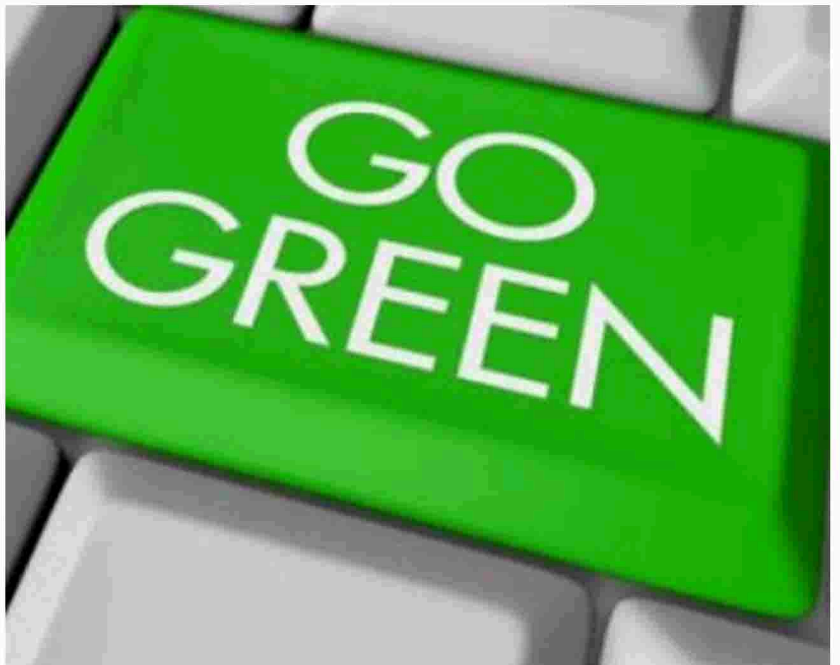- ➢ **Human Activities**

TYPES OF GREEN COMPUTING

- ➢ *Solar Power System*
- ➢ *Wind Turbine Program*
- ➢ *Geothermal Power*

GOALS OF GREEN COMPUTING

- ➢ **To minimize the implementation of hazardous products.**
- ➢ **More production of energy efficiency.**
- ➢ **To use the recyclability of wasted product and factory wasted products.**
- ➢ **To design proper algorithms for improve the computer's efficiency**

NEED OF GREEN COMPUTING

1)Save energy

2)Save environment

3)Recycle of wate product

4) Save Money

5)Energy consumption

APPROACHES TO GREEN COMPUTING

- ➢ *Terminal Servers*
- ➢ *Power Management*
- ➢ *Power Supply*
- ➢ *Storage*
- ➢ *Product Recycling*

ADVANTAGES

1) Energy Saving

2) cost saving

3) Recycling Process

4) Brand Strengthen

5) Less pollution

6) GHG Emissions

7) chemical exposure

8) Green IT implementation

9) Saving energy and resources saves money

10) Renewable energy

DISADVANTAGES

1) Implementation cost

2) Performance

3) Maintenance

4) Adaptation

5) Security leaks

6) IT knowledge

7) Support system

8) Green IT cause more burden to an individual

9) Rapid technology Change

10) Power Management

EXAMPLE

E.g.- Renewable Energy Sources:-

➢ *Renewable energy sources don't use fossil fuel. They are available freely, are environmentally friendly and generate less pollution. Apple, who is building a new corporate centre, is planning to use most of the building's wind turbine technology, and Google has already built a wind-powered data centre.*

CO_2 FOOTPRINT

METHODS TO CURE CARBON FOOTPRINTING IN GREEN COMPUTING

Improving systems' efficiency

- ➤ *Old PC's*
- ➤ *Outdated part and insufficient memory*
- ➤ *Upgrade the equipment*

Using Renewable Energy in IT

- ➤ *Green computing Eco-friendly*
- ➤ *Carbon free computing*
- ➤ *Solar energy computing*

Reduce Your Carbon Footprint

FIVE WAYS TO REDUCE CARBON FOOTPRINT

- ➤ *learn the 5 R's: refuse, reduce, reuse, rot, recycle: Going zero waste is a great step towards combating climate change. ...*

- ➤ *bike more and drive less: ...*

- ➤ *conserve water and protect our waterways: ...*

- ➤ *eat seasonally, locally, and more plants: ...*

- ➤ *switch to sustainable, clean energy:*

HOW YOU CAN SUPPORT GREEN COMPUTING

Energy star labeled products

Turn off computer

Optimal brightness level

Use of IT peripherals

Screen Saver

Environmental Companies

Donate or Recycle

Both side printing

Sleep mode

Power Management

Use email

Non-petroleum inks

Use VoIP technology

Replace LCD/CRT to OLED

Participate recycling program

Green packing solution

Don't buy new printers

THINK GREEN

HOW WE CAN CALCULATE CARBON FOOTPRINT

➤ **Define what all thing contributes to the carbon footprint**

➤ **Baseline should be set**

➤ **Track and analyse the carbon footprint of the organization**

➤ **Report the result to stakeholders**

CONCLUSION

➤Features of Green computing

➤Society needs more consumption

➤Alternative ways to design system

➤Contribution to green computing

➤Eco-friendly sustainable component

THANKYOU